

FILE 'CAPLUS' ENTERED AT 17:47:35 ON 29 JAN 2002

L1 107 S SPOT (2W) SYNTHE?
L2 18 S L1 AND SCREEN?
L3 2 S L2 AND SEPARAT?
L4 17 S SYNTHES? (10A) SEPARAT? (10A) SCREEN?

=> d l3 ibib abs 1-2

L3 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2001:234139 CAPLUS

DOCUMENT NUMBER: 134:367149

TITLE: Positionally addressable parallel synthesis on continuous membranes

AUTHOR(S): Wenschuh, Holger; Gausepohl, Heinrich; Germeroth, Lothar; Ulbricht, Mathias; Matuschewski, Heike; Kramer, Achim; Volkmer-Engert, Rudolf; Heine, Niklas; Ast, Thomas; Scharn, Dirk; Schneider-Mergener, Jens

CORPORATE SOURCE: Jerini Bio Tools GmbH, Berlin, 12489, Germany

SOURCE: Comb. Chem. (2000), 95-116. Editor(s): Fenniri, Hicham. Oxford University Press: Oxford, UK.

CODEN: 69BBZ2

DOCUMENT TYPE: Conference; General Review

LANGUAGE: English

AB A review with 20 refs. Spatially addressable high-throughput solid phase synthesis of large arrays of compds. has generated intense interest over the past few years. Besides parallel synthesis on resin beads, polymeric pins and chips, SPOT synthesis using continuous membrane supports has been shown to be an efficient solid phase synthetic alternative. The development of this approach was fuelled by the need for a facile and economical complement to the classical solid phase synthesis procedures with increased flexibility and amenability to miniaturization and automation. The key feature of the SPOT method is the positionally addressed delivery of small vols. of liqs. directly to the membrane support. The droplets dispensed form sep. SPOTS and can be considered as microreactors. The vols. dispensed create a specific SPOT size detg. both the scale of reaction and the abs. no. of compds. that can be arranged on an area of a membrane. The compds. synthesized can be evaluated while still attached to the membrane, or in soln. after release from the membrane, using conventional high-throughput screening techniques. Semi-automated SPOT synthesis of large arrays of compd. is also possible using the ABIMED ASP 222 robotic system.

REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES

L3 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1999:150653 CAPLUS

DOCUMENT NUMBER: 130:322308

TITLE: Regions of endonuclease EcoRII involved in DNA target recognition identified by membrane-bound peptide repertoires

AUTHOR(S): Reuter, Monika; Schneider-Mergener, Jens; Kupper, Dagmar; Meisel, Andreas; Mackeldanz, Petra; Kruger, Detlev H.; Schroeder, Cornelia

CORPORATE SOURCE: Institutes of Virology, Humboldt University Medical School (Charite), Berlin, D-10098, Germany

SOURCE: J. Biol. Chem. (1999), 274(8), 5213-5221

CODEN: JBCHA3; ISSN: 0021-9258

PUBLISHER: American Society for Biochemistry and Molecular Biology

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Target sequence-specific DNA binding regions of the restriction endonuclease EcoRII were identified by screening a membrane-bound EcoRII-derived peptide scan with an EcoRII recognition site (CCWGG) oligonucleotide duplex. Dodecapeptides overlapping by nine amino acids and representing the complete protein were prep'd. by spot synthesis. Two sep. DNA binding regions, amino acids 88-102 and amino acids 256-273, which share the consensus motif KXRXXK, emerged. Screening 570 single substitution analogs obtained by exchanging every residue of both binding sites for all other amino acids demonstrated that replacing basic residues in the consensus motifs significantly reduced DNA binding. EcoRII mutant enzymes generated by substituting alanine or glutamic acid for the consensus lysine residues in DNA binding site I expressed attenuated DNA binding, whereas corresponding substitutions in DNA binding site II caused impaired cleavage, but enzyme secondary structure was unaffected. Furthermore, Glu96, which is part of a potential catalytic motif and also locates to DNA binding site I, was demonstrated to be crit. for DNA cleavage and binding. Homol. studies of DNA binding site II revealed strong local homol. to SsoII (recognition sequence, CCNGG) and patterns of sequence conservation, suggesting the existence of functionally related DNA binding sites in diverse restriction endonucleases with recognition sequences contg. terminal C:G or G:C pairs.

REFERENCE COUNT: 53 THERE ARE 53 CITED REFERENCES

=> d l4 ibib abs 1-17

L4 ANSWER 2 OF 17 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2001:662448 CAPLUS

DOCUMENT NUMBER: 135:344974

TITLE: Rapid separation and detection techniques in combinatorial polymer screening

AUTHOR(S): Petro, Miroslav; Nguyen, Son Hoai; Regan, Jackie; Galdo, Isabel; Zhou, Betty; DelVecchio, Jian

CORPORATE SOURCE: Symyx Technologies, Inc., Santa Clara, CA, 95051, USA

SOURCE: Polymer Preprints (American Chemical Society, Division of Polymer Chemistry) (2001), 42(2), 655

CODEN: ACPPAY; ISSN: 0032-3934

PUBLISHER: American Chemical Society, Division of Polymer Chemistry

DOCUMENT TYPE: Journal; (computer optical disk)

LANGUAGE: English

AB Various chromatog., fractionation and flow-injection anal. techniques were found suitable to identify and quantify the mol. size, mol. architecture, chem. compn., and multiple distribution profiles of these characteristics

at a speed that is satisfactory to match the speed of parallel polymer synthesis. As an example, screening data for a model random poly(AB) copolymer library show a change in molar ratio between the comonomers A and B (0-100%). The data also show how an increase in monomer/initiator ratio affects the mol. wt. The combinatorial chem. approaches supported by rapid automated anal. techniques lead to a significant acceleration of discovery process in material polymer science.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE

L4 ANSWER 3 OF 17 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2001:389995 CAPLUS

DOCUMENT NUMBER: 135:241017

TITLE: Screening and catalytic activity in organic synthesis of novel fungal and yeast lipases

AUTHOR(S): Cardenas, F.; Alvarez, E.; de Castro-Alvarez, M.-S.; Sanchez-Montero, J.-M.; Valmaseda, M.; Elson, S. W.; Sinisterra, J.-V.

CORPORATE SOURCE: Centro de Investigacion Basica, Santiago Grisolia, SmithKline Beecham, Tres Cantos, Madrid, 28760, Spain

SOURCE: J. Mol. Catal. B: Enzym. (2001), 14(4-6), 111-123

CODEN: JMCEF8; ISSN: 1381-1177

PUBLISHER: Elsevier Science B.V.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A total of 969 microbial strains were isolated from soil samples and tested to det. their lipolytic activity by employing screening techniques on solid and in liq. media. Ten lipase-producing microorganisms were selected and their taxonomic identification was carried out. From these strains *Acremonium murorum*, *Monascus mucoroides*, *Arthroderma ciferri*, *Fusarium poae*, *Ovadendron sulphureo-ochraceum* and *Rhodotorula araucariae* are described as lipase-producers for the first time. Hydrolysis activity of the crude lipases against both tributyrin and olive oil was measured. Heptyl oleate synthesis was carried out to test the activity of the selected lipases as biocatalysts in org. medium. All the selected lipases were tested as biocatalysts in several org. reactions using unnatural substrates. Lipases from the fungi *Fusarium. oxysporum* and *O. sulphureo-ochraceum* gave the best yields and enantioselectivities in the esterification of carboxylic acids. *F. oxysporum* and *Penicillium chrysogenum* lipases were the most active ones for the acylation of alcs. without steric hindrance. *A. murorum* lipase is very useful for the esterification of menthol. *F. oxysporum* and *Fusarium. solani* lipases were very stereoselective in the synthesis of carbamates.

REFERENCE COUNT: 49 THERE ARE 49 CITED REFERENCES

L4 ANSWER 5 OF 17 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2001:6806 CAPLUS

DOCUMENT NUMBER: 134:339573

TITLE: Screening of lipase-producing strain and synthesis of S-(+)-naproxen by asymmetric hydrolysis
AUTHOR(S): Xin, Jiaying; Li, Shuben; Xu, Yi; Wang, Lailai; Shen, Rennan; Li, Yuchi
CORPORATE SOURCE: OSSO, Lanzhou Institute of Chemical Physics, Chinese Academy of Sciences, Lanzhou, 730000, Peop. Rep. China
SOURCE: Gongye Weishengwu (2000), 30(3), 31-35
CODEN: GOWEEK; ISSN: 1001-6678
PUBLISHER: Quanguo Gongye Weishengwu Xinxi Zhongxin
DOCUMENT TYPE: Journal
LANGUAGE: Chinese
AB A bacterium, Bacillus E-53 was screened from soil, which preferentially hydrolyzed S-(+)-isomer of the racemic naproxen Me ester to produce S-(+)-naproxen. The strain showed higher specificity of resolu. about 87% ee. The optimal medium for producing lipase contained 0.5% of glucose, 0.5% of peptone and 0.2% of yeast ext. 0.5% Of olive oil could induce lipase prodn.

L4 ANSWER 6 OF 17 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2000:514831 CAPLUS
DOCUMENT NUMBER: 133:228438
TITLE: Controlling the performance of silicalite-1 membranes
AUTHOR(S): Gora, Leszek; Jansen, Jacobus C.; Maschmeyer, Thomas
CORPORATE SOURCE: Laboratory for Applied Organic Chemistry and Catalysis, DelftChemTech, Delft University of Technology, Delft, 2628 BL, Neth.
SOURCE: Chem.--Eur. J. (2000), 6(14), 2537-2543
CODEN: CEUJED; ISSN: 0947-6539
PUBLISHER: Wiley-VCH Verlag GmbH
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The structural and performance characteristics (for n- and i-butane sepn.) of self-supported silicalite-1 membranes, were optimized by fine-tuning their syntheses by screening a total of 9 SiO₂ sources and many reaction conditions. The mass balances indicate that membrane thickness is a function of both the synthesis vol. and the SiO₂ source used. The excellent properties of the final membrane are demonstrated by its high permselectivity of 31 for n-butane combined with a n-butane flux of 10 mmol m⁻²s⁻¹, indicating perfect performance. For 50/50 mixts. (of n and i) the selectivity for n-butane was 48 and its flux was 3.8 mmol m⁻²s⁻¹. For the given selectivities, in relation to the membrane thickness, the theor. fluxes are the highest values ever reported, underlining the point that high structural integrity is essential to achieve superior functionality.
REFERENCE COUNT: 38 THERE ARE 38 CITED REFERENCES

L4 ANSWER 9 OF 17 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1999:334166 CAPLUS
DOCUMENT NUMBER: 131:116203

TITLE: 4-Aryl-5-oxo-1,2,3,4,5,6,7,8-octahydroquinazoline-2- thione derivatives: synthesis, enantiomeric separation and in vitro screening as calcium antagonists

AUTHOR(S): Sarac, S.; Yarim, M.; Ertan, M.; Erol, K.; Aktan, Y.

CORPORATE SOURCE: Department of Pharmaceutical Chemistry, Faculty of Pharmacy, Hacettepe University, Ankara, Turk.

SOURCE: Boll. Chim. Farm. (1997), 136(11), 657-664

CODEN: BCFAAI; ISSN: 0006-6648

PUBLISHER: Societa Editoriale Farmaceutica

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Fourteen 4-aryl-5-oxo-1,2,3,4,5,6,7,8-octahydroquinazoline-2-thiones were prepd. and screened in vitro for their calcium antagonistic activities.

The compds. were prepd. by reacting 1,3-cyclohexanedione with arom. aldehydes and thiourea under modified Bignelli reaction conditions. The compds. exerted calcium antagonistic action on smooth musculature by inhibiting BaCl₂-induced contractions of isolated rat ileum.

REFERENCE COUNT: 34 THERE ARE 34 CITED REFERENCES

L4 ANSWER 11 OF 17 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1998:597932 CAPLUS

DOCUMENT NUMBER: 130:1444

TITLE: Determination of intramolecular distances between SH-2 domains of ZAP-70 by peptide structure activity relationships

AUTHOR(S): Singleton, David H.; Guarino, Bradley C.; Andrews, Glenn C.; Gardner, Joseph P.; Guerra, Leticia; Geoghegan, Kieran F.

CORPORATE SOURCE: Pfizer Central Research, Groton, CT, 06340, USA

SOURCE: Pept. 1996, Proc. Eur. Pept. Symp., 24th (1998), Meeting Date 1996, 807-808.

Editor(s): Ramage, Robert; Epton, Roger. Mayflower Scientific: Kingswinford, UK.

CODEN: 66RCA5

DOCUMENT TYPE: Conference

LANGUAGE: English

AB The authors report here synthesis and binding of peptides contg.

two pYXXL motifs sepd. by varying sequences and lengths and screened their ability to bind a SH-2 domains of ZAP-70.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE

L4 ANSWER 14 OF 17 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1997:112706 CAPLUS

DOCUMENT NUMBER: 126:220284

TITLE: 5-Methyl-8-N-substituted-thiocarbamoyl-7,8- diazabicyclo[4.3.0]non-6-enes: evaluation as BSAO inhibitors and pharmacological activity screening

AUTHOR(S): Yesilada, Akgul; Gokhan, Nesrin; Ozer, Inci; Vural, Kamil; Erol, Kevser

CORPORATE SOURCE: Department of Pharmaceutical Chemistry, Faculty of Pharmacy, Hacettepe University, Ankara, Turk.

SOURCE: Farmaco (1996), 51(12), 775-780

CODEN: FRMCE8

PUBLISHER: Societa Chimica Italiana

DOCUMENT TYPE: Journal

LANGUAGE: English

AB In this study a series of 5-methyl-8-N-substituted-thiocarbamoyl-7,8-diazabicyclo[4.3.0]non-6-enes derivs. previously synthesized and sepd. to their stereoisomers, were evaluated as BSAO inhibitors and screened pharmacol. for antidepressant activity, effect on anxiety and exptl. parkinsonism by in vivo tests. The title compds. caused 30-40% inhibition irresp. of geometric isomerism as well as nature of substituent. Their open chain deriv. NBE (4-Et, p-methoxybenzyliden-thiosemicarbazide) showed a marked enzyme inhibition and antidepressant effect. While the other group was inactive as antidepressant effect, these compds. have shown diastereoselective antitremor activity by inhibiting the tremors induced by oxotremorin in mice pretreated with dopaminergic antagonist haloperidol. The title compds. constitutes a new class of BSAO inhibitors and may serve as useful leads for further investigation as specific BSAO inhibitors, antiparkinson, antidepressant and anticholinergic agents.

=> d l1 ibib abs 1-10

L1 ANSWER 1 OF 10 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2002:33155 CAPLUS

TITLE: Towards an integrated platform for combinatorial library synthesis and screening

AUTHOR(S): Williams, Lorenzo; Bergersen, Ove

CORPORATE SOURCE: SINTEF Applied Chemistry, Oslo, 0314, Norway

SOURCE: Journal of Planar Chromatography--Modern TLC (2001), 14(5), 318-321

CODEN: JPCTE5; ISSN: 0933-4173

PUBLISHER: Research Institute for Medicinal Plants

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Combined technol. for the synthesis, sepn., screening, and anal. of combinatorial libraries is described. The technique enables a rapid route from synthesis to the testing of chem. compds. Chem. can be rapidly optimized and vital information obtained by testing byproducts and reagents simultaneously if desired. Screening can be performed without need for reaction work-up and without the need for undesired chem. manipulation, or further handling. Emphasis has been given to bioautog./agar overlay screening methods for the testing of antimicrobial agents.

REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES

L1 ANSWER 2 OF 10 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2001:265363 CAPLUS

DOCUMENT NUMBER: 134:280392

TITLE: A method for preparing and screening one or more compounds

INVENTOR(S): Williams, Lorenzo

PATENT ASSIGNEE(S): Sinvent AS, Norway

SOURCE: PCT Int. Appl., 46 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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WO 2001025172	A1	20010412	WO 2000-IB1441	20001006
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W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: NO 1999-4873 A 19991006

AB A method for sequentially performing a synthesis, sepn
and screening of chem. entities, esp. a combinatorial library,
is described. The method utilizes a bulk of a stationary phase (e.g.
silica gel, aluminum oxide, cellulose, etc. arranged on a backing) for the
performance of the synthesis, sepn. And screening. The technique described enables a
rapid route from synthesis to the testing of chem. compds. Screening can be performed
without need for reaction work-up.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE

L1 ANSWER 3 OF 10 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2000:225195 CAPLUS

DOCUMENT NUMBER: 133:135900

TITLE: Microspheres, microcapsules and liposomes: General concepts and criteria

AUTHOR(S): Arshady, Reza

CORPORATE SOURCE: Department of Chemistry, University of London, London,
SW7 2AY, UK

SOURCE: Microspheres, Microcapsules Liposomes (1999), 1(Preparation & Chemical
Applications), 11-45

CODEN: MMLIFU; ISSN: 1461-1732

PUBLISHER: Citus Books

DOCUMENT TYPE: Journal; General Review

LANGUAGE: English

AB The review with 54 refs. provides a general introduction to the broad
subject of microspheres (MISs, also called microbeads), microcapsules
(MICs) and liposomes (LIPs). It presents a historical background to the
development of MISs in several different fields, including polymer
technol., chromatog., solid phase synthesis and biomedical technol. It
highlights current and potential applications of MISs, MICs and LIPs
throughout the chem. and life sciences and related industries from
sepn. and anal. to org. synthesis, immunol. screening and diagnostics to drug and
vaccine delivery, agrochems. to food, and paper coating and adhesives to precision
engineering. General aspects of particle size, morphol., compn., chem. structure and
manufg. methodol. of MISs, MICs and LIPs are discussed. In addn. to their
technol. significance, the versatility of MISs, MICs and LIPs for use in
different media, their very large surface to vol. ratios and membranous
structures are also suggested to represent a very rich area of curiosity
driven basic research.

REFERENCE COUNT: 59 THERE ARE 59 CITED REFERENCES

L1 ANSWER 4 OF 10 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1999:383258 CAPLUS

DOCUMENT NUMBER: 131:159230

TITLE: Microscale synthesis and screening of combinatorial libraries of new chromatographic stationary phases
AUTHOR(S): Welch, Christopher J.; Protopopova, Marina N.; Bhat, Ganapati A.
CORPORATE SOURCE: Regis Technologies, Inc., Morton Grove, IL, USA
SOURCE: Spec. Publ. - R. Soc. Chem. (1999), 235(Fundamental and Applied Aspects of Chemically Modified Surfaces), 129-138

CODEN: SROCDO; ISSN: 0260-6291

PUBLISHER: Royal Society of Chemistry
DOCUMENT TYPE: Journal; General Review
LANGUAGE: English

AB A review with 18 refs. The authors describe a new method for rapid solid stationary phase synthesis and screening of libraries contg. milligram quantities of diverse chiral stationary phases (CSPs). To illustrate the power of the method, the authors present prepn. of a library of 50 dipeptide 3,5-dinitrobenzoyl CSPs and the results of screening of the library for the sepn. of the enantiomers of a test racemate. The example shows that the method provides a wealth of information on the structural requirements for chiral mol. recognition and that useful chromatog. adsorbents for industrial sepn. processes can be rapidly discovered by the method.

REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES

L1 ANSWER 5 OF 10 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1999:334166 CAPLUS

DOCUMENT NUMBER: 131:116203

TITLE: 4-Aryl-5-oxo-1,2,3,4,5,6,7,8-octahydroquinazoline-2- thione derivatives: synthesis, enantiomeric separation and in vitro screening as calcium antagonists

AUTHOR(S): Sarac, S.; Yarim, M.; Ertan, M.; Erol, K.; Aktan, Y.

CORPORATE SOURCE: Department of Pharmaceutical Chemistry, Faculty of Pharmacy, Hacettepe University, Ankara, Turk.

SOURCE: Boll. Chim. Farm. (1997), 136(11), 657-664

CODEN: BCFAAI; ISSN: 0006-6648

PUBLISHER: Societa Editoriale Farmaceutica

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Fourteen 4-aryl-5-oxo-1,2,3,4,5,6,7,8-octahydroquinazoline-2-thiones were prepd. and screened in vitro for their calcium antagonistic activities. The compds. were prepd. by reacting 1,3-cyclohexanedione with arom. aldehydes and thiourea under modified Bignelli reaction conditions. The compds. exerted calcium antagonistic action on smooth musculature by inhibiting BaCl₂-induced contractions of isolated rat ileum.

REFERENCE COUNT: 34 THERE ARE 34 CITED REFERENCES

L1 ANSWER 6 OF 10 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1999:37247 CAPLUS

DOCUMENT NUMBER: 130:182753

TITLE: Microscale synthesis and screening of chiral stationary phases
AUTHOR(S): Welch, Christopher J.; Protopopova, Marina N.; Bhat, Ganapati
CORPORATE SOURCE: Regis Technologies Inc., Morton Grove, IL, 60053, USA
SOURCE: Enantiomer (1998), 3(6), 471-476

CODEN: EANTE2; ISSN: 1024-2430

PUBLISHER: Gordon & Breach Science Publishers

DOCUMENT TYPE: Journal

LANGUAGE: English

AB An approach for the microscale synthesis and screening of combinatorial libraries of chiral stationary phases (CSPs) is described. This technique offers a no. of advantages over previously described methods for the prepn. and evaluation of new CSPs: The stationary phases are made on 50 mg scale or less and need not be packed into columns to be evaluated; a solid phase synthesis approach can be utilized to create diverse libraries of candidate CSPs; evaluation of the CSPs directly reveals the best CSP for a particular sepn., consequently the screening results can be directly translated to chromatog. performance. Thus, a library of 50 silica gel-bound N-(3,5-dinitrobenzoyl)dipeptides was prepd. by coupling 5 amino acids (phenylglycine, valine, proline, glutamine, and phenylalanine) to aminopropyl silica gel, followed by amidation with 3,5-dinitrobenzoyl chloride. The combinatorial library was screened for resolu. of racemic N-(2-naphthyl)alanine diethylamide.

REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES

L1 ANSWER 7 OF 10 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1997:411039 CAPLUS

DOCUMENT NUMBER: 127:119338

TITLE: Synthesizing and screening molecular diversity

INVENTOR(S): Dower, William J.; Barrett, Ronald W.; Gallop, Mark A.; Needels, Michael C.

PATENT ASSIGNEE(S): Affymax Technologies N.V., Neth. Antilles

SOURCE: U.S., 33 pp. Cont.-in-part of U.S. Ser. No. 946, 239.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5639603	A	19970617	US 1993-146886	19931102
EP 773227	A1	19970514	EP 1996-202827	19920916
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, SE				
US 5770358	A	19980623	US 1992-946239	19920916
WO 9512608	A1	19950511	WO 1994-US12347	19941102
W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI,				

GB, GE, HU, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG,
MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TJ, TT, UA,
US, US

RW: KE, MW, SD, SZ, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU,
MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN,
TD, TG

AU 9511280 A1 19950523 AU 1995-11280 19941102

AU 703472 B2 19990325

EP 726906 A1 19960821 EP 1995-902404 19941102

R: CH, DE, FR, GB, IT, LI, NL

GB 2298863 A1 19960918 GB 1996-9254 19941102

GB 2298863 B2 19980311

CN 1134156 A 19961023 CN 1994-193984 19941102

BR 9407947 A 19961126 BR 1994-7947 19941102

JP 09508353 T2 19970826 JP 1994-513301 19941102

US 6143497 A 20001107 US 1998-36599 19980306

US 6165717 A 20001226 US 1998-78403 19980513

US 6165778 A 20001226 US 1998-109613 19980702

PRIORITY APPLN. INFO.: US 1991-762522 B2 19910918

US 1992-946239 A2 19920916

EP 1992-920422 A3 19920916

US 1993-146886 A 19931102

US 1993-149675 A 19931102

WO 1994-US12347 W 19941102

US 1995-432312 B1 19950501

US 1995-484085 B1 19950607

US 1995-484505 A1 19950607

AB The invention relates generally to methods for synthesizing very large collections of diverse mols. and for identifying and isolating compds. with useful and desired activities from such collection. The invention also relates to the incorporation of identification tags in such collections to facilitate identification of compds. with desired properties. The invention, therefore, relates to the fields of chem., biol., pharmacol., and related fields. As an example, in an improved method for synthesizing a synthetic peptide library comprising a plurality of different members, each member comprising a peptide composed of a sequence of amino acid monomers linked to a bead to which bead is also linked .gtoreq.1 oligonucleotide identifier tags identifying the sequence of monomers in said peptide, wherein said amino acid monomers are protected with Fmoc and piperidine is used to remove the Fmoc protecting group, the improvement comprising effecting Fmoc removal by treatment with 5-15% piperidine for 5-60 min or 15-30% piperidine for 1-30 min.

L1 ANSWER 8 OF 10 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1995:850846 CAPLUS

DOCUMENT NUMBER: 123:260737

TITLE: Rule-based synthesis of separation systems by predictive best first search with rules represented as trapezoidal numbers

AUTHOR(S): Qian, Y.; Lien, K. M.

CORPORATE SOURCE: Chem. Eng. Res. Cent., South China Univ. Technol., Canton, Peop. Rep. China

SOURCE: Comput. Chem. Eng. (1995), 19(11), 1185-205

CODEN: CCENDW; ISSN: 0098-1354

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A new rule-based systematic screening procedure was presented for synthesis of sepn. systems, in which rules were represented as trapezoidal nos., which enable partial pattern matching and graded outcome of rules contg. continuous variables. Instead of performing conventional conflict resolu. on a rule set in order to det. which rule to execute next, it was proposed simultaneously to evaluate the graded outcome of all rules in the rule base and feed the result of this evaluation to a predictive best-first search mechanism. Clean sepn. between pattern matching and search was thus achieved. An admissible prediction function was found, making it possible to guarantee that the search algorithm terminates with optimal solns. when the sharp split search space is restricted to simple separators. The proposed approach was based in part of qual. knowledge about sepn. problems. The search algorithm was designed to produce a user-specified no. of alternative best solns., which may subsequently be evaluated in more detail using more rigorous models. Examples were included to illustrate the suggested approach.

L1 ANSWER 9 OF 10 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1987:198331 CAPLUS

DOCUMENT NUMBER: 106:198331

TITLE: Minimum energy requirements of thermally coupled distillation systems

AUTHOR(S): Fidkowski, Zbigniew; Krolikowski, Lechoslaw

CORPORATE SOURCE: Inst. Chem. Eng. Heat. Equip., Wroclaw Tech. Univ., Wroclaw, 50-373, Pol.

SOURCE: AIChE J. (1987), 33(4), 643-53

CODEN: AICEAC; ISSN: 0001-1541

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Energy requirements of 4 different, thermally coupled, distn. systems were minimized for an assumed ideal ternary soln. Min. vapor flows and values of decision variables were derived in the form of anal. expressions. This enables making a quick and simple comparison of these systems. The soln. method can be used in the synthesis of sepn. systems or for screening calcns.

L1 ANSWER 10 OF 10 CAPLUS COPYRIGHT 2002 ACS

performing conventional conflict resolu. on a rule set in order to det. which rule to execute next, it was proposed simultaneously to evaluate the graded outcome of all rules in the rule base and feed the result of this evaluation to a predictive best-first search mechanism. Clean sepn. between pattern matching and search was thus achieved. An admissible prediction function was found, making it possible to guarantee that the search algorithm terminates with optimal solns. when the sharp split search space is restricted to simple separators. The proposed approach was based in part of qual. knowledge about sepn. problems. The search algorithm was designed to produce a user-specified no. of alternative best solns., which may subsequently be evaluated in more detail using more rigorous models. Examples were included to illustrate the suggested approach.

L1 ANSWER 9 OF 10 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1987:198331 CAPLUS

DOCUMENT NUMBER: 106:198331

TITLE: Minimum energy requirements of thermally coupled distillation systems

AUTHOR(S): Fidkowski, Zbigniew; Krolikowski, Lechoslaw

CORPORATE SOURCE: Inst. Chem. Eng. Heat Equip., Wroclaw Tech. Univ., Wroclaw, 50-373, Pol.

SOURCE: AIChE J. (1987), 33(4), 643-53

CODEN: AICEAC; ISSN: 0001-1541

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Energy requirements of 4 different, thermally coupled, distn. systems were minimized for an assumed ideal ternary soln. Min. vapor flows and values of decision variables were derived in the form of anal. expressions. This enables making a quick and simple comparison of these systems. The soln. method can be used in the synthesis of sepn. systems or for screening calcns.

L1 ANSWER 10 OF 10 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1986:188923 CAPLUS

DOCUMENT NUMBER: 104:188923

TITLE: Thermally coupled system of distillation columns: optimization procedure

AUTHOR(S): Fidkowski, Zbigniew; Krolikowski, Lechoslaw

CORPORATE SOURCE: Inst. Chem. Eng. Heat Equip., Wroclaw Tech. Univ., Wroclaw, 50-373, Pol.

SOURCE: AIChE J. (1986), 32(4), 537-46

CODEN: AICEAC; ISSN: 0001-1541

DOCUMENT TYPE: Journal

LANGUAGE: English

AB An anal. soln. of thermally coupled system (TCS) optimization was found. Energy requirements of the TCS were minimized, provided that the ternary soln. being sepd. is ideal. The TCS is energetically profitable in

comparison with other sequences of distn. columns. The soln. method can be used for the synthesis of sepn. systems and for screening calcns. lowering to the great simplicity of the result.

L2 ANSWER 2 OF 21 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2001:662448 CAPLUS

DOCUMENT NUMBER: 135:344974

TITLE: Rapid separation and detection techniques in combinatorial polymer screening

AUTHOR(S): Petro, Miroslav; Nguyen, Son Hoai; Regan, Jackie; Galdo, Isabel; Zhou, Betty; DelVecchio, Jian

CORPORATE SOURCE: Symyx Technologies, Inc., Santa Clara, CA, 95051, USA

SOURCE: Polymer Preprints (American Chemical Society, Division of Polymer Chemistry) (2001), 42(2), 655

CODEN: ACPPAY; ISSN: 0032-3934

PUBLISHER: American Chemical Society, Division of Polymer Chemistry

DOCUMENT TYPE: Journal; (computer optical disk)

LANGUAGE: English

AB Various chromatog., fractionation and flow-injection anal. techniques were found suitable to identify and quantify the mol. size, mol. architecture, chem. compn., and multiple distribution profiles of these characteristics at a speed that is satisfactory to match the speed of parallel polymer synthesis. As an example, screening data for a model random poly(AB) copolymer library show a change in molar ratio between the comonomers A and B (0-100%). The data also show how an increase in monomer/initiator ratio affects the mol. wt. The combinatorial chem. approaches supported by rapid automated anal. techniques lead to a significant acceleration of discovery process in material polymer science.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE

L2 ANSWER 7 OF 21 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2000:514831 CAPLUS

DOCUMENT NUMBER: 133:228438

TITLE: Controlling the performance of silicalite-1 membranes

AUTHOR(S): Gora, Leszek; Jansen, Jacobus C.; Maschmeyer, Thomas

CORPORATE SOURCE: Laboratory for Applied Organic Chemistry and Catalysis, DelftChemTech, Delft University of Technology, Delft, 2628 BL, Neth.

SOURCE: Chem.--Eur. J. (2000), 6(14), 2537-2543

CODEN: CEUJED; ISSN: 0947-6539

PUBLISHER: Wiley-VCH Verlag GmbH

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The structural and performance characteristics (for n- and i-butane sepn.) of self-supported silicalite-1 membranes, were optimized by fine-tuning their syntheses by screening a total of 9 SiO₂ sources and many reaction conditions. The mass balances indicate that membrane thickness is a function of both

the synthesis vol. and the SiO₂ source used. The excellent properties of the final membrane are demonstrated by its high permselectivity of 31 for n-butane combined with a n-butane flux of 10 mmol m⁻²s⁻¹, indicating perfect performance. For

50/50 mixts. (of n and i) the selectivity for n-butane was 48 and its flux was 3.8 mmol m⁻²s⁻¹. For the given selectivities, in relation to the membrane thickness, the theor. fluxes are the highest values ever reported, underlining the point that high structural integrity is essential to achieve superior functionality.

REFERENCE COUNT: 38 THERE ARE 38 CITED REFERENCES

L2 ANSWER 11 OF 21 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1999:147013 CAPLUS

TITLE: Combinatorial synthesis and screening of new adsorbents for process scale enantioseparations

AUTHOR(S): Welch, Christopher J.

CORPORATE SOURCE: Regis Technologies, Inc., Morton Grove, IL, 60053, USA

SOURCE: Book of Abstracts, 217th ACS National Meeting, Anaheim, Calif., March 21-25 (1999), I&EC-186. American Chemical Society: Washington, D. C.

CODEN: 67GHA6

DOCUMENT TYPE: Conference; Meeting Abstract

LANGUAGE: English

AB Finding the optimal adsorbent for a large scale chromatog. sepn. can be a time consuming and laborious task. We have recently developed a technique for the microscale synthesis and screening of adsorbent libraries which allows hundreds of different chromatog. stationary phases prepd. by a combinatorial synthesis approach to be rapidly screened for their ability to carry out a given sepn.

An example related to the chromatog. sepn. of enantiomers will be presented in which the identified chiral stationary phase shows a very high level of enantioselectivity and a nearly unprecedented level of productivity for the chromatog. sepn. of the enantiomers of a model racemate.

L2 ANSWER 17 OF 21 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1996:138486 CAPLUS

DOCUMENT NUMBER: 124:193122

TITLE: Combinatorial synthesis. The freeways of diversity

AUTHOR(S): Bourel, Line; Williard, Xavier; Pop, Iuliana; Baudelle, Romuald; Horvath, Dragos; Deprez, Benoit; Melnyk, Patricia; Tartar, Andre

CORPORATE SOURCE: Chimie des biomolécules, Institut Pasteur de Lille, Lille, 59019, Fr.

SOURCE: Actual. Chim. (1995), (7), 33-40

CODEN: ACCHDG; ISSN: 0151-9093

DOCUMENT TYPE: Journal; General Review

LANGUAGE: French

AB A review, with 15 refs., discussing the principles of the combinatorial synthesis of large nos. of org. compds., and the techniques of their sepn., identification, and pharmacol. screening, as an efficient method of drug design.

through a 60- μ sieve. The sieve fines were successively washed with 1N HCl, H₂O, MeOH, ether and then air dried. Next, 45 g microcryst. cellulose and 5 g exchanger were suspended in 180 ml aq. soln. of 0.08% CM-cellulose. Also, 50 g cellulose was homogenized in 200 ml H₂O. Then 0.25 mm thick layers of both suspensions were applied in strips of the appropriate width to a plate, after which the plate was dried for 15 min at 85.degree..

L12 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1983:191869 CAPLUS

DOCUMENT NUMBER: 98:191869

TITLE: A rapid and simple assay for the study of thromboxane B₂ synthesis by intact human platelets

AUTHOR(S): Margotat, Alain; Sampol, Jose; Hawthorn, Dominique; Dumas, Dominique; Leone, Monique

CORPORATE SOURCE: Lab. Biochim. Med., INSERM, Marseille, 13385, Fr.

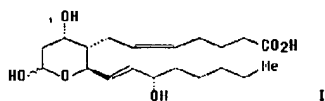
SOURCE: J. Pharmacol. Methods (1983), 9(1), 63-70

CODEN: JPMED9; ISSN: 0160-5402

DOCUMENT TYPE: Journal

LANGUAGE: English

GI



AB Conversion of 1-¹⁴C-labeled arachidonic acid (AA) [506-32-1] to TXB₂ (I) [54397-85-2] by human platelets was studied by using a new, simple technique. Org. solvent extn. was avoided by spotting aliquots of the reaction mixt. directly on TLC plates. The plates were developed in CHCl₃-MeOH-HOAc-H₂O (90:10:4:1), and the spots were visualized with I vapor and counted. In this way it was possible to study the kinetic parameters of the formation of I.